



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,194	03/28/2001	Jan H. Labuschagne	TIMK 7938US	2895
1688 7590 08/22/2007 POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			EXAMINER A, PHI DIEU TRAN	
			ART UNIT 3637	PAPER NUMBER
			MAIL DATE 08/22/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/819,194
Filing Date: March 28, 2001
Appellant(s): LABUSCHAGNE, JAN H.

MAILED

AUG 22 2007

GROUP 3600

EDWARD A. BOESCHENSTEIN
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/17/07 appealing from the Office action mailed 07/06/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3308845	BELLAS ET AL	03-1967
2034507	COLSON	3-1936
2274964	JAMES	3-1942
2594810	SCHAUB ET AL	4-1952

Art Unit: 3637

3139748	STRUM JR.	7-1964
3402349	PARKER	9-1968
3580059	DALTON	5-1971
5588752	FETTY	12-1996
5165169	BOYCE	11-1992

DIEGLE, RICH " DAKOTA WHEEL BEARING NOISE" ADAMS BUSINESS MEDIA
MOTOR SERVICE, NO. 9, VOL 80, PAGE 70, SEPTEMBER 1, 2001, PAGES 1-2

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the different equipments/means for as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be

necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 6-7, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Diegle (NPL) and Strum Jr. (3139748) and James (2274964).

Bellas et al shows a portable facility having an enclosure that is portable in the sense that it can be moved by a transport vehicle, means within the enclosure (col 1 lines 49-55) for lubricating bearings (col 6 line 29), and more means within the enclosure, the means for cleaning (22, water compartment), the enclosure having at least one end through which access to the interior of the enclosure being obtained, a deck (7) at said one end of the enclosure, the enclosure containing stations (figure 5) at which means are located (67, 68, 39, 38, 35 figure 5, col 7 lines 20-34), the enclosure having side walls and the stations being located along the side walls, a center aisle separates the stations along the side walls, ends through which access to the interior of the enclosure is obtained, a roof (52, 14) which extends between the side walls and over the

Art Unit: 3637

interior of the enclosure, doors attached to the side walls for closing the ends of the enclosure, a washer located containing a solution, equipment within the enclosure, spare parts for replacing components of a vehicle (col 4 lines 30-35).

Bellas et al does not show means for inspecting components of the bearing, means for repairing defects in components of the bearing, spared races and rolling elements located within the enclosure to replace damaged races and rolling elements.

Diegle (pages 3-7) discloses removing, inspecting, cleaning, and replace defective bearing parts to service the driveline bearings.

Sturm Jr. shows means for inspecting components of a bearing, rolling elements, and races.

James shows means for repairing defects in components in bearings.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al to show means for inspecting components of the bearing as taught by Sturm Jr., means for repairing defects in components of the bearing as taught by James, spared races and rolling elements to replace bearing parts as taught by Diegle (page 6) located within the enclosure to replace damaged races and rolling elements because having means for inspecting components of the bearing, means for repairing defects in components of the bearing would allow for the inspection and treating of bearings, races and rolling elements at a location near where the defective bearing, race, and rolling element is, and having spared races, and rolling elements would allow for the inspecting, cleaning, and replacing of any races and rolling elements deem too damage to repair as taught by Bellas et al, Diegle, and Sturm Jr.

Art Unit: 3637

2. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Diegle, Strum Jr. (3139748) and James (2274964).

Bellas et al as modified shows all the claimed limitations except for the means for cleaning the bearing being located outside the enclosure.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al's modified facility to show the means for cleaning the bearing being located outside the enclosure because attaching a water hose to the water tank to lead the water to outside of the enclosure would allow for the service of the component outside the enclosure and thus gives an employee an outside service area which is less confined and a better working environment.

3. Claims 8, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Diegle, Strum Jr. (3139748), Colson (2034507), and Boyce (5165169).

Bellas et al shows a portable facility having an enclosure that is portable in the sense that it can be moved by a transport vehicle, means within the enclosure (col 1 lines 49-55), means (22, water tank) on the deck(7) for removing grease, means for lubricating bearings with grease, the enclosure having at least one end through which access to the interior of the enclosure being obtained, a deck (7) at said one end of the enclosure, the enclosure containing stations (figure 5) at which means are located (67, 68, 39, 38, 35 figure 5, col 7 lines 20-34), the enclosure having side walls and the stations being located along the side walls, a center aisle separates the stations along the side walls, ends through which access to the interior of the enclosure is obtained, a roof (52, 14) which extends between the side walls and over the interior of the enclosure, doors attached to the side walls for closing the ends of the enclosure.

Art Unit: 3637

Bellas et al does not show means for inspecting the cone assembly, means at another of the stations for inspecting and repairing the raceway of the cup, means at still another station for opening the cage and releasing the rollers, means at yet another station for repairing the raceway of the cone, a spared cage in the enclosure, means at another station for closing a new cage about the rollers on the cone to retain the rollers on the cone and unite the cone assembly formed by cone, rollers and new cage.

Diegle (pages 3-7) discloses removing, inspecting, cleaning, and replace defective bearing parts to service the driveline bearings.

Strums Jr. shows means for inspecting the cone assembly.

Colson shows means for inspecting and repairing the raceway of the cup and the raceway of the cone.

Boyce shows means for opening the cage and releasing the rollers, means for closing a new cage about the rollers on the cone to retain the rollers on the cone and unite the cone assembly formed by cone, rollers and new cage.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al to means for inspecting the cone assembly as taught by Strums Jr., means at another of the stations for inspecting and repairing the raceway of the cup and the raceway of the cone as taught by Colson, means at still another station for opening the cage and releasing the rollers, means at another station for closing a new cage about the rollers on the cone to retain the rollers on the cone and unite the cone assembly formed by cone, rollers and new cage as taught by Boyce, a spared cage as taught by Diegle to replace bearing parts in the enclosure because it would allow for the inspection and treating of bearings, races and rolling

Art Unit: 3637

elements at a location near where the defective bearing, race, and rolling element is, and having spared cage would allow for the replacements of damaged cage when repairing the bearings as taught by Bellas et al, Diegle, and Sturm Jr.

4. Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Diegle, Strum Jr. (3139748), Colson (2034507), and Boyce (5165169), as applied to claim 8 above, and further in view of Schaud et al (2594810).

Bellas et al as modified all the claimed limitations except for means for installing a seal into the cup, spare seals in the enclosure.

Schaud et al shows means for installing a seal (25) into a cup.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al 's modified structure to show means for installing a seal into the cup, spare seals in the enclosure as taught by Schaud et al because it would allow for the installation of new seals on a bearing as taught by Schaud et al, and having spared seal would allow for the replacements of damaged seal when repairing the bearings.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Diegle, Strum Jr. (3139748), Colson (2034507), and Boyce (5165169), as applied to claim 8 above, and further in view of Dalton (3580059).

Bellas et al as modified all the claimed limitations except for means for measuring the end play in the bearing.

Dalton shows means for measuring the end play in the bearing.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al 's modified structure to show means for measuring the end play

Art Unit: 3637

in the bearing because it would allow for the accurate measurement of the end play of the bearing .

6. Claims 20, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Boyce (5165169) and Diegle.

Bellas et al shows a portable facility having an enclosure that is portable in the sense that it can be moved by a transport vehicle, a washer solution (22) for cleaning equipment, an air conditioning unit supported on the enclosure, a dust extraction system, the enclosure is mounted on a railcar (the unit fits the definition of a railcar as railcar is not yet defined in the claim).

Bellas et al does not show equipment for inspecting the races, equipment for repairing the bearing, spare inner and outer races and rolling elements located within the enclosure to replace a damaged race or rolling element.

Diegle (pages 3-7) discloses removing, inspecting, cleaning, and replace defective bearing parts to service the driveline bearings.

Boyce shows equipment for inspecting the races, equipment for repairing the bearing, inner and outer races and rolling elements to replace a damaged race or rolling element.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al's facility to show equipment for inspecting the races, equipment for repairing the bearing, spare inner and outer races and rolling elements located within the enclosure to replace a damaged race or rolling element because it would allow for the servicing of bearings, and having spare inner and outer races and rolling elements within the enclosure would allow for the easy replacements of the components of the bearing when needed as taught by Diegle and Boyce.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Boyce (5165169) and Diegle as applied to claim 20 above and further in view of Fetty (5588752).

Bellas et al as modified shows all the claimed limitations except for spare seals located within the enclosure for replacing the seals of the bearing.

Fetty shows a bearing having seals located on the bearings.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al's modified facility to show spare seals located within the enclosure for replacing the seals of the bearing because having spare seals within the enclosure would allow for the replacement of seals for the type of bearings with seals taught by Fetty.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Boyce (5165169) and Diegle as applied to claim 20 above and further in view of Parker (3402349).

Bellas et al as modified shows all the claimed limitations except for an equipment for inspecting the races including a fixture, which shines a light on the inner race.

Parker shows an equipment(162) for inspecting the races including a fixture, which shines a light on the inner race.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al's modified facility to show an equipment for inspecting the races including a fixture which shines a light on the inner race because having lighting means would allow for easy, and correct working of a work piece as taught by Parker.

Art Unit: 3637

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Boyce (5165169) and Diegle as applied to claim 20 above and further in view of Colson (2034507).

Bellas et al as modified shows all the claimed limitations except for an equipment for inspecting the bearing including a gauge that measures the diameter of a bore that extends through the inner race.

Colson shows an equipment for inspecting the bearing including a gauge that measures the diameter of a bore that extends through the inner race

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al's modified facility to show an equipment for inspecting the bearing including a gauge that measures the diameter of a bore that extends through the inner race because it allows for the easy, accurate finishing of the size of a product as by Colson.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Boyce (5165169) and Diegle as applied to claim 20 above and further in view of Beach (1276013) and Fetty.

Bellas et al as modified shows all the claimed limitations except for a bearing having outer race being unitary and having two raceways which are inclined downwardly toward each other, the inner race being on two separate components, each having a raceway that is presented toward a raceway of the outer race and is inclined in the same direction as the raceway toward which it is presented, the rolling elements being arranged in two rows, a separate row around each raceway of the inner race, the bearing including a cage located around each component of the inner race, the equipment including a press which will plastically deform the cage around

either component of the inner race to free the rolling elements from the race, a press, a spacer located between the components of the inner race to impart the end play to the bearing.

Fetty shows a bearing having outer race being unitary and having two raceways which are inclined downwardly toward each other, the inner race being on two separate components, each having a raceway that is presented toward a raceway of the outer race and is inclined in the same direction as the raceway toward which it is presented, the rolling elements being arranged in two rows, a separate row around each raceway of the inner race, the bearing including a cage located around each component of the inner race,

Beach shows a press, which will, presses and assembles the bearing component together.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al's modified facility to show a bearing having outer race being unitary and having two raceways which are inclined downwardly toward each other, the inner race being on two separate components, each having a raceway that is presented toward a raceway of the outer race and is inclined in the same direction as the raceway toward which it is presented, the rolling elements being arranged in two rows, a separate row around each raceway of the inner race, the bearing including a cage located around each component of the inner race, the equipment including a press which will plastically deform the cage around either component of the inner race to free the rolling elements from the race, a spacer located between the components of the inner race to impart the end play to the bearing as taught by Fetty, a press as taught by Beach because having the bearing as disclosed by Fetty in the enclosure would allow for the service of the particular type of bearing disclosed by Fetty, and having a press would allow for the easy pressing together of structures.

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Diegle, Boyce (5165169), Beach (1276013) and Fetty as applied to claim 24 above and further in view of Colson (2034507).

Bellas et al as modified shows all the claimed limitations except for a lateral measuring machine which rotates the inner race within the outer race, applies axial directed forces to the inner race in both axial directions, and measures the free motion between the inner and outer races resulting from the two directions of force.

Colson shows a lateral measuring machine, which rotates the inner race within the outer race, applies axial directed forces to the inner race in both axial directions, and measures the free motion between the inner and outer races resulting from the two directions of force.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al's modified facility to show a lateral measuring machine which rotates the inner race within the outer race, applies axial directed forces to the inner race in both axial directions, and measures the free motion between the inner and outer races resulting from the two directions of force because it allows for the measured calibrating of the races and the bearing as taught by Colson.

12. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Boyce (5165169) and Diegle.

Bellas et al as modified shows all the claimed limitations except for a handheld grinder.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al's modified facility to show a handheld grinder because a handheld grinder is a well known means for quickly grinding away surfaces, and the inclusion of the

Art Unit: 3637

hand held grinder in a vehicle servicing facility would have been obvious to one having ordinary skill in the art as it allows the technician to quickly grind away any structure's surface when needed.

13. Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellas et al (3308845) in view of Diegle, Boyce (5165169) and further in view of Colson (2034507)

Bellas et al as modified shows all the claimed limitations except for a polishing tool.

Colson shows a polishing tool (29) for polishing the bearing.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Bellas et al's modified facility to show a polishing tool because it allows for the polishing of the bearing as taught by Colson.

(10) Response to Argument

With respect to claim 1, applicant states that R. Karich's declaration filed with amendment G defined the level of skill in the art and that one would expect a rejection base on a reference pertaining to antifriction bearings, examiner would like to set forth the followings. First of all, Karich's declaration does not set forth the level of one of ordinary skill in the art as pertinent to the invention as claimed. Karich's declaration discloses the different levels of technical difficulties involved in providing the services. The claimed invention, however, is to the level of skill required for a person to think of servicing the bearing on site with a mobile structure, instead of at a stationary workshop. Deciding to provide a service on site, instead of at a shop, does not require the levels of skill set forth by the declaration; Secondly, Bellas discloses the servicing of bearings on site (col 6 line 28-29), which brings forth the idea of servicing bearings on site being known. Thirdly, bearings, which by nature of its use are to reduce friction

Art Unit: 3637

of mating structures, and thus bearings are anti-friction bearings, and applicant has not brought forth any structural difference between applicant's claimed anti-friction bearings, and the bearings disclosed by Bellas. The argument is thus moot.

With respect to Diegle, Sturm, and James, the references disclose the idea of providing services to a bearing in a vehicle. Diegle in particular, discloses the idea of using spare parts to replace defective bearing parts. Combining the teaching of Bellas for servicing vehicle with bearing on site to those of Diegle, Sturm, and James, would enable one to service bearings on site by inspecting, cleaning, and replacing defect parts. One with ordinary skill in the art would find that the combination of the teachings, is motivated as it allows for the proper servicing of bearings on site. Furthermore, applicant further states that the equipment/means for servicing the bearings are conventional means (specification page 9 lines 6-10, and page 15 last paragraph). The argument is thus moot.

With respect to applicant's argument that Bellas does not have equipment for reconditioning bearings, nor spare bearing components, examiner respectfully sets forth that the combination of Bellas with Diegle, Sturm, and James, results in Bellas showing teachings of spare bearing components, and equipment for reconditioning bearings as claimed. The argument is thus moot.

With respect to means for cleaning a bearing, Bellas discloses the use of water to an article. The water certainly can be used to clean a bearing. With respect to the many stations with equipment, examiner respectfully sets forth that the Bellas reference as modified shows the equipment at stations as claimed. The argument is thus moot.

With respect to applicant's statement to the Montgerard patent and the declaration of Samuel R. Williams, examiner respectfully states that Montgerard is no longer relied upon for rejecting the claims. Also, once again, Samuel R. Williams' declaration does not set forth the level of one skill in the art required to think of the idea of servicing a structure on site, and that the idea is already demonstrated as known in the art by Bellas.

With respect to the reference being analogous, examiner respectfully states that Bellas discloses serving vehicle bearing on site, and the secondary references also disclose the servicing of vehicle bearings. Applicant's invention is to the idea of servicing a vehicle on site. The references certainly are analogous to applicant's invention as claimed, and within the filed of applicant's endeavor. The argument is thus moot.

With respect to applicant's arguments to the different skill levels required for the services set forth by Bellas and those required with applicant's invention, examiner sets forth that Bellas discloses servicing bearings on site, and applicant discloses servicing bearings on site. Bellas thus demonstrates that the skills for the services of bearings, are readily available and utilized. Applicant further states that equipment for servicing the bearings is conventional. The invention is to the servicing of bearings on site. It follows that whether or not one of ordinary skill in the art would find it obvious to service bearings on site. Bellas teaches servicing bearings on site, without stating the equipment and spare parts. Modifying Bellas's teaching to include conventional equipment as disclosed by applicant to service bearings, would certainly be within one of ordinary skill in the art. The argument is thus moot.

With respect to the use of different stations to service the bearings, Bellas itself teaches the use of different stations to service different parts of a vehicle. It follows that having

Art Unit: 3637

equipment servicing different parts of a vehicle would have been obvious to one having ordinary skill in the art.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

With respect to claims 4-5, Bellas as modified shows the means for cleaning the bearings as claimed. Applicant has not provided any structural limitation that distinguishes Bellas' means for cleaning as claimed. The argument is thus moot.

With respect to claims 8, 11, 12, applicant claims a portable facility with equipment for servicing a tapered roller bearing, and spare cages. Bellas as modified shows equipment for servicing roller bearings and other claimed structural limitations. Bellas as modified, also is able to service a tapered roller bearing as claimed. The argument is thus moot.

With respect to claim 9, applicant's argument is also moot in view of the statements set forth above. The argument is thus moot.

With respect to claim 10, Dalton shows the means for measuring the end play in the bearing. As claimed, it is unclear what applicant's means is or look like. The teaching of Dalton satisfies the limitation as claimed. The argument is thus moot.

Art Unit: 3637

With respect to claim 20 and 29, as stated in the action above, Bellas as modified shows servicing bearings that are used on locomotive. The reference as modified also shows the equipment as claimed. The argument is thus moot.

Per claim 29, as stated above in the office action, railcar is not yet defined in the claim and Bellas's vehicle appears to fit the railcar limitation as claimed. The argument is thus moot.

Per claim 21-28, applicant's arguments are moot in light of the statements set forth above to the reference Bellas.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Phi Dieu Tran A



08/17/07

Conferees:

Lanna Mai



Meredith Petravick



LANNA MAI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

